Using BibTEX for AGU Publications

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AGU Citations

With the introduction of the electronic publications at the AGU and other journals, a new scheme has been introduced to make up the reference lists. Existing BibTEX databases and style files cannot handle this. This problem is more general than just for AGU.

At first a great deal of annoyance was created by the AGU's removal of page numbers from the printed editions, and from the list of references. A DOI number was used instead. This *Digital Object Identifier* is a more elaborate URL for locating electronic articles, but is not so helpful for finding the printed version.

Hence, AGU was compelled to introduce another number, the *citation number.* This is a sequence number for the printed articles within a given volume. The same thing is used by other journals, for example by the Physical Review.

Now AGU would like to have both the DOI and citation number to appear in the list of references. See their revised rules for citation at <http://www.agu.org/pubs/reports/eos13aug.htm>.

Doing it with BibTEX

I have previously supplied some BibTEX style files to go along with my `aguplus` package, which are now included in the current AGU LaTeX package `agu2001`. I have now updated them to version 2.2, which will produce output as now required by the AGU.

Two additional fields are available:

`doi` to enter the DOI number (without the "doi: " prefix, which is added automatically by the style;

`eid` to enter the citation number, or *electronic identifier.* This field is already being used by the Physical Review and other journals of the American Physics Society, hence the name is fixed.

There is a guideline from the AGU for producing the reference lists (http://www.agu.org/pubs/AuthorRefSheet.pdf) and my new BibTEX styles will reproduce it.

I highly recommend that you load the standard package `url` by Donald Arseneau. My `agu.bst` and `agufull.bst` will use it to split the long DOI number over a line, without adding a hyphen.

The bibliography style files

There are two `bst` files available, `agu.bst` and `agufull.bst`. They produce identical formatting results, except that the first will truncate the list of authors if it exceeds 9, printing only the first author *et al.* The second file, `agufull.bst` always outputs the entire list of authors.

A sample bib file

Here is a sample BibTEX file containing most of the references in the AGU example. Note the use of the `eid` and `doi` fields in the first entry.

The resulting list of references is shown afterwards.

This is a test bib file for AGU
It contains all the examples from the
AuthorRefSheet.pdf, April 15, 2003

The fields EID and DOI are new, and are not yet standard for
all BibTeX files, but I hope they will be soon.

EID is what AGU calls "citation number" and what other publishers
 call "sequence number". It replaces the page number for electronic
 journals.

Recall rules for title: words that are always to be capitalized are
   placed in {Curly Braces} while other words should be capitalized
   as they would be printed for those journals that like capitalized
   titles; for other journals, like AGU, these words will be set in
   lower case.

These rules do not apply to BOOKTITLE, which is printed as is.

The first letter of a note text will also be set in lower case, unless
   placed in curly braces.

```
@ARTICLE{ma2003,
  AUTHOR =        "J. Ma and D. W. Waugh and A. R. Douglass and S. R. Kawa
                   and S.-J. Lin",
  TITLE =         "Evaluation of the Transport in the {Goddard
                   Space Flight Center} Three-Dimensional Chemical
                   Transport Model using the Equivalent Length Diagnostic",
  JOURNAL =       jgr,
  YEAR =          "2003",
  volume =        "108",
  number =        "D6",
  doi    =        "10.1029/2002JD002268",
  eid    =        "4201"
}

@ARTICLE{Brophy1999,
  AUTHOR =        "J. G. Brophy and E. M. Klein and M. A. Stewart",
  TITLE =         "Textural ({Nomarski} Interferometry) Studies of Plagioclase
                   Phenocryst Zonation Styles in {MORB} Dikes and Lavas from
                   the North Wall of the {Hess Deep Rift}",
  JOURNAL =       "Eos Trans. AGU",
  YEAR =          "1999",
  volume =        "80",
  number =        "46",
  note =          "{Fall} Meet. Suppl., F985",
}

@ARTICLE{Morrill2001,
  AUTHOR =        "J. C. Morrill  and R. C. Bales and M. H. Conklin",
  TITLE =         "The Relationship Between Air Temperature and Stream Temperature",
  JOURNAL =       "Eos Trans. AGU",
  YEAR =          "2001",
  volume =        "82",
  number =        "20",
  note =          "{Spring} Meet. Suppl., Abstract H42A-09",
```

```
}

@ARTICLE{Weaver1993,
  AUTHOR =        "C. J. Weaver and A. R. Douglass and R. B. Rood",
  TITLE =         "Thermodynamic Balance of Three-Dimensional Stratospheric Winds
                   Derived from a Data Assimilation Procedure",
  JOURNAL =       "J. Atmos. Sci.",
  YEAR =          "1993",
  volume =        "50",
  pages =         "2987-2993",
}

@ARTICLE{Werner2003,
  AUTHOR =        "S. Werner and R. C. Beardsley and A. J. Williams",
  TITLE =         "Bottom Friction and Bedforms on the Southern Flank of {Georges
                   Bank}",
  JOURNAL =       jgr,
  YEAR =          "2003",
  doi    =        "10.1029/2002JC000692",
  note =          "in press"
}

@BOOK{Gaines1992,
  editor =        "Gaines, S. and P. Hataway and S. Hipskind",
  TITLE =         "Airborne Arctic Stratospheric Expedition II",
  PUBLISHER =     "NASA Ames Res. Cent.",
  YEAR =          "1992",
  address =       "Moffett Field, Calif.",
  series    =       "CDROM NASA/UARP-004"
}

@BOOK{McDougall1999,
  editor =        "McDougall, I. and T. M. Harrison",
  TITLE =         "Geochronology and Thermochronology by the $^{40}$Ar/$^{39}$Ar Method",
  PUBLISHER =     "Oxford Univ. Press",
  YEAR =          "1999",
  address =       "New York",
  edition =       "2nd",
  pages   =       "269",
}

@INCOLLECTION{Sweet1958,
  AUTHOR =        "P. A. Sweet",
  editor =        "B. Lehnert",
  TITLE =         "The Neutral Point Theory of Solar Flares",
  BOOKTITLE =     "Electromagnetic Phenomena in Cosmic Physics",
  pages =         "123-134",
  PUBLISHER =     "Cambridge Univ. Press",
  address =       "New York",
  YEAR =          "1958",
}

@INCOLLECTION{Scholz2003,
  AUTHOR =        "Scholz, C. H. and T. C. Hanks",
  TITLE =         "The Strength of the {San Andreas} Fault: A Discussion",
  BOOKTITLE =     "Rheology and Deformation of the Lithosphere at
```

```
                    Continental Margins",
  PUBLISHER =       "Columbia Univ. Press",
  YEAR =            "2003",
  editor =          "G. D. Karner and others",
  address =         "New York",
  note =            "In press",
}


@INCOLLECTION{Tullis1986,
  AUTHOR =          "T. Tullis and J. Tullis",
  TITLE =           "Experimental Rock Deformation Techniques",
  BOOKTITLE =       "Mineral and Rock Deformation: Laboratory Studies",
  volume =          "36",
  series =          "Geophys. Monogr. Ser.",
  PUBLISHER =       "AGU",
  YEAR =            "1986",
  editor =          "B. E. Hobbs and H. C. Heard",
  pages =           "297-324",
  address =         "Washington, D.C.",
}


@UNPUBLISHED{Englemann1986,
  author = "Englemann, R. J. and R. W. Perkins and D. I. Hagan
            and W. A. Haller",
  title = "Washout Coefficients for Selected Gases and Particulates",
  note ="Paper presented at 59th Annual Meeting, Air Pollut.
        Control Agency, San Francisco, Calif., 20--24
         June 1986"
}
```

References

This is the result of processing the above sample `bib` file with `agu.bst`.

Brophy, J. G., E. M. Klein, and M. A. Stewart, Textural (Nomarski interferometry) studies of plagioclase phenocryst zonation styles in MORB dikes and lavas from the north wall of the Hess Deep Rift, *Eos Trans. AGU*, *80*(46), Fall Meet. Suppl., F985, 1999.

Englemann, R. J., R. W. Perkins, D. I. Hagan, and W. A. Haller, Washout coefficients for selected gases and particulates, paper presented at 59th Annual Meeting, Air Pollut. Control Agency, San Francisco, Calif., 20–24 June 1986.

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Ma, J., D. W. Waugh, A. R. Douglass, S. R. Kawa, and S.-J. Lin, Evaluation of the transport in the Goddard Space Flight Center three-dimensional chemical transport model using the equivalent length diagnostic, *J. Geophys. Res.*, *108*(D6), 4201, doi:10.1029/2002JD002268, 2003.

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Morrill, J. C., R. C. Bales, and M. H. Conklin, The relationship between air temperature and stream temperature, *Eos Trans. AGU*, *82*(20), Spring Meet. Suppl., Abstract H42A-09, 2001.

Scholz, C. H., and T. C. Hanks, The strength of the San Andreas fault: A discussion, in *Rheology and Deformation of the Lithosphere at Continental Margins*, edited by G. D. Karner et al., Columbia Univ. Press, New York, in press, 2003.

Sweet, P. A., The neutral point theory of solar flares, in *Electromagnetic Phenomena in Cosmic Physics*, edited by B. Lehnert, pp. 123–134, Cambridge Univ. Press, New York, 1958.

Tullis, T., and J. Tullis, Experimental rock deformation techniques, in *Mineral and Rock Deformation: Laboratory Studies*, *Geophys. Monogr. Ser.*, vol. 36, edited by B. E. Hobbs and H. C. Heard, pp. 297–324, AGU, Washington, D.C., 1986.

Weaver, C. J., A. R. Douglass, and R. B. Rood, Thermodynamic balance of three-dimensional stratospheric winds derived from a data assimilation procedure, *J. Atmos. Sci.*, *50*, 2987–2993, 1993.

Werner, S., R. C. Beardsley, and A. J. Williams, Bottom friction and bedforms on the southern flank of Georges Bank, *J. Geophys. Res.*, doi:10.1029/2002JC000692, in press, 2003.